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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/697,638 | 10/31/2003 | Tsutomu Matsuzaki | 062709-0115 | 8489 |

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| EXAMINER |
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FONTAINE, MONICA A

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| ART UNIT | PAPER NUMBER |
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1732

DATE MAILED: 12/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/697,638

Applicant(s)

MATSUZAKI ET AL.

Examiner

Monica A Fontaine

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) 1-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 103103,063004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Applicant's election of Claims 16-33 in the reply filed on 8 October 2004 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claims 1-15 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected cross member, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 8 October 2004.

Claim Objections

Claim 16 is objected to because of the following informalities: It is believed that the word "in" in line 10 is superfluous. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 16-18, 20, 28-29, and 31-32 are rejected under 35 U.S.C. 102(b) as being anticipated by Millif et al. (U.S. Patent 6,214,266). Regarding Claim 16, Millif et al., hereafter

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“Millif,” show that it is known to carry out a method of manufacturing a cross member which is arranged so as to extend in a width direction of a vehicle body, having both ends connected to side framework structures of the vehicle body (Abstract), the method comprising forming a base frame extending in a width direction of the vehicle body by means of resinous molding (Column 3, lines 14-16); and insert molding the base frame, within limited ranges thereof in the width direction of the vehicle body, in resinous material belonging to a same material system as material of the base frame, thereby forming reinforcing frame parts [in] integral with the base frame (Column 3, lines 31-35).

Regarding Claim 17, Millif shows the process as claimed as discussed in the rejection of Claim 16 above, including a method wherein the base frame is injection molded (Column 3, lines 14-16).

Regarding Claim 18, Millif shows the process as claimed as discussed in the rejection of Claim 16 above, including a method wherein the reinforcing frame parts are produced by means of insert molding while inserting part of the base frame into a molding die (Column 3, lines 24-46).

Regarding Claim 20, Millif shows the process as claimed as discussed in the rejection of Claim 16 above, including a method wherein the base frame and the reinforcing frame parts are made from the same engineering material (Column 3, lines 23-25).

Regarding Claim 28, Millif shows the process as claimed as discussed in the rejection of Claims 16 and 18 above, including a method wherein the reinforcing frame parts are produced by means of injection molding while inserting a part of the base frame (Column 3, lines 24-46).

Regarding Claim 29, Millif shows the process as claimed as discussed in the rejection of Claim 16 above, including a method further comprising accommodating the base frame in a molding die, the base frame having a plurality of bosses formed on the outer circumferential surface of the base frame, the bosses each having a height capable of contacting with the inner surface of the molding die in closed condition (Figures 3 and 4); and filling up a cavity between the outer circumferential surface of the base frame and the inner surface of the molding die with molten resin to provide the reinforcing frame parts by hardening the molten resin, whereby the base frame is covered with the reinforcing frame parts (Figures 3 and 4; Column 5, lines 50-67; Column 6, lines 1-14).

Regarding Claim 31, Millif shows the process as claimed as discussed in the rejection of Claims 16 and 29 above, including a method wherein the bosses are shaped to be substantially columnar (Figure 3).

Regarding Claim 32, Millif shows the process as claimed as discussed in the rejection of Claims 16 and 29 above, including a method wherein the base frame has a plurality of ribs formed on the outer circumferential surface of the base frame (Figure 3).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 30 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Millif.

Regarding Claims 30 and 33, Millif shows the process as claimed as discussed in the rejection of Claims 16 and 29 above, but he does not show specific claimed arrangement of bosses. However, to be entitled to weight in method claims, recited structural limitations must affect the method in a manipulative sense and not amount to mere claiming of a use of a particular structure (*Ex parte Pfieffer* 135 USPQ 31).

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Millif, in view of Hier et al. (U.S. Patent 6,568,707). Millif shows the process as claimed as discussed in the rejection of Claim 16 above, but he does not show relative rigidity between the first material and the second material. Hier et al., hereafter "Hier," show that it is known to carry out a manufacturing method wherein the material of the reinforcing frame parts is higher in rigidity than the material of the base frame (Column 3, lines 62-67; Column 4, lines 1-4). Hier and Millif are combinable because they are concerned with a similar technical field, namely, molding processes which yield vehicle parts. It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Hier's rigidity teachings in Millif's molding process in order to obtain an article which has the appropriate structure to be useful in a vehicular environment.

Claims 21, 24, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Millif, in view of Aichner et al. (U.S. Patent 6,231,940).

Regarding Claim 21, Millif shows the process as claimed as discussed in the rejection of Claims 16 and 20 above, but he does not show reinforcing material in the base frame. Aichner et

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al., hereafter "Aichner," show that it is known to carry out a manufacturing method wherein the base frame is made from resinous material containing reinforcing material (Column 5, lines 6-23). Aichner and Millif are combinable because they are concerned with a similar technical field, namely, molding processes which yield vehicle parts. It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Aichner's reinforced base frame in Millif's molding process in order to obtain an article which has the appropriate structure to be robust in a vehicular environment.

Regarding Claim 24, Millif shows the process as claimed as discussed in the rejection of Claims 16, 20, and 21 above, but he does not show a specific reinforcing fiber in his base frame. Aichner shows that it is known to carry out a manufacturing method wherein the reinforcing material contains glass fiber (Column 5, line 20). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Aichner's glass-reinforced base frame in Millif's molding process in order to obtain an article which has the appropriate structure to be robust in a vehicular environment.

Regarding Claim 25, Millif shows the process as claimed as discussed in the rejection of Claims 16, 20, and 21 above, but he does not show a specific reinforcing composition. However, it is well established that proportions or values are critical only when they involve a difference in kind rather than degree (*In re Touvay et al.*, 121 USPQ 265).

Claims 22, 26, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Millif, in view of Anderson et al. (U.S. Patent 6,468,458).

Regarding Claim 22, Millif shows the process as claimed as discussed in the rejection of Claims 16 and 20 above, but he does not show reinforcing material in his reinforcing frame parts. Anderson et al., hereafter "Anderson," show that it is known to carry out a manufacturing method wherein the reinforcing frame parts are made from resinous material containing a reinforcing material (Column 4, lines 15-17). Anderson and Millif are combinable because they are concerned with a similar technical field, namely, molding processes which yield vehicle parts. It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Anderson's reinforced frame parts in Millif's molding process in order to obtain an article which has the appropriate structure to be appropriate for a specific vehicular application.

Regarding Claim 26, Millif shows the process as claimed as discussed in the rejection of Claims 16, 20, and 22 above, but he does not show a specific reinforcing element. Anderson shows that it is known to carry out a manufacturing method wherein the reinforcing material contains light reflective particles (Column 4, lines 15-17: metal fiber). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Anderson's metal-reinforced frame parts in Millif's molding process in order to obtain an article which has the appropriate structure to be appropriate for a specific vehicular application.

Regarding Claim 27, Millif shows the process as claimed as discussed in the rejection of Claims 16, 20, and 22 above, but he does not show a specific reinforcing composition. However, it is well established that proportions or values are critical only when they involve a difference in kind rather than degree (*In re Touvay et al.*, 121 USPQ 265).

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Millif, in view of Cooper (EP 1329302). Millif shows the process as claimed as discussed in the rejection of Claim 16 above, but he does not show forming a hollow part. Cooper shows that it is known to carry out a manufacturing method wherein the base frame has a hollow part (Abstract). Cooper and Millif are combinable because they are concerned with a similar technical field, namely, molding processes which yield vehicle parts. It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Anderson's reinforced frame parts in Millif's molding process in order to obtain an article which has the appropriate structure to be appropriate for a specific vehicular application.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patent is cited to further show the state of the art with regard to insert molding vehicle parts in general:

U.S. Patent 6,093,358 to Schiewe et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monica A Fontaine whose telephone number is 571-272-1198. The examiner can normally be reached on Monday-Friday 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Colaianne can be reached on 571-272-1196. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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December 13, 2004



MICHAEL P. COLAIANNI
SUPERVISORY PATENT EXAMINER